## **DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2022-0464; Project Identifier MCAI-2021-01290-T]

**RIN 2120-AA64** 

**Airworthiness Directives; Airbus SAS Airplanes** 

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Airbus SAS Model A350-941 and -1041 airplanes. This proposed AD was prompted by a report of inadvertent auto flight system (AFS) altitude changes on the flight control unit (FCU). This proposed AD would require revising the existing airplane flight manual (AFM) to include a procedure on the use of the AFS control panel ALT knob and replacing any affected FCU with a serviceable FCU, as specified in a European Union Aviation Safety Agency (EASA), which is proposed for incorporation by reference. This proposed AD would also prohibit the installation of affected parts. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
  - Mail: U.S. Department of Transportation, Docket Operations, M-30, West

Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m.,
 Monday through Friday, except Federal holidays.

For material that will be incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this material on the EASA website at https://ad.easa.europa.eu. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0464.

### **Examining the AD Docket**

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0464; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Dan Rodina, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3225; email dan.rodina@faa.gov.

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include

"Docket No. FAA-2022-0464; Project Identifier MCAI-2021-01290-T" at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

#### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Dan Rodina, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3225; email dan.rodina@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0260, dated November 18, 2021 (EASA AD 2021-0260) (also referred to as the MCAI), to correct an unsafe condition for all Airbus SAS Model A350-941 and -1041 airplanes. This proposed AD was prompted by a report of inadvertent AFS altitude changes on the FCU; an investigation revealed that, depending on the ring selection, failure of the ALT knob on the FCU could change the target altitude, by either by 100 or 1,000 feet. The erroneous altitude shows in the AFS cockpit panel display and in the primary flight display of the FCU, but the flightcrew might not notice. Further investigation revealed that the cause was an incorrect manufacturing process of the ALT knob encoder. The FAA is proposing this AD to address erroneous target altitude during descent, climb, or go-around, which could result in an unexpected vertical trajectory deviation and loss of correct situational awareness that could potentially result in uncontrolled impact with the ground. See the MCAI for additional background information.

### **Related Service Information Under 1 CFR Part 51**

EASA AD 2021-0260 describes procedures for revising the existing AFM to include a procedure on the use of the AFS control panel ALT knob and replacing any affected FCU having part numbers (P/N) C31006AC01 or C31006AB01 with a serviceable FCU having P/N C31006AD01. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **FAA's Determination**

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, it has notified the FAA of the unsafe condition

described in the MCAI referenced above. The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in EASA AD 2021-0260 described previously, except for any differences identified as exceptions in the regulatory text of this proposed AD. This proposed AD would also prohibit the installation of affected parts.

EASA AD 2021-0260 requires operators to "inform all flight crews" of revisions to the AFM, and thereafter to "operate the aeroplane accordingly." However, this proposed AD would not specifically require those actions as those actions are already required by FAA regulations. FAA regulations require operators furnish to pilots any changes to the AFM (for example, 14 CFR 121.137), and to ensure the pilots are familiar with the AFM (for example, 14 CFR 91.505). As with any other flightcrew training requirement, training on the updated AFM content is tracked by the operators and recorded in each pilot's training record, which is available for the FAA to review. FAA regulations also require pilots to follow the procedures in the existing AFM including all updates. 14 CFR 91.9 requires that any person operating a civil aircraft must comply with the operating limitations specified in the AFM. Therefore, including a requirement in this proposed AD to operate the airplane according to the revised AFM would be redundant and unnecessary.

## **Explanation of Required Compliance Information**

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs.

The FAA has been coordinating this process with manufacturers and CAAs. As a result,

the FAA proposes to incorporate EASA AD 2021-0260 by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2021-0260 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in EASA AD 2021-0260 does not mean that operators need comply only with that section. For example, where the AD requirement refers to "all required actions and compliance times," compliance with this AD requirement is not limited to the section titled "Required Action(s) and Compliance Time(s)" in EASA AD 2021-0260. Service information required by EASA AD 2021-0260 for compliance will be available at https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0464 after the FAA final rule is published.

# **Costs of Compliance**

The FAA estimates that this proposed AD would affect 27 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

#### **Estimated costs for required actions**

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Up to 6 work-hours X \$85 per hour = \$510	\$27,000	Up to \$27,510	Up to \$742,770

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive: **Airbus SAS:** Docket No. FAA-2022-0464; Project Identifier MCAI-2021-01290-T.

### (a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

None.

## (c) Applicability

This AD applies to all Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category.

## (d) Subject

Air Transport Association (ATA) of America Code 22, Auto Flight.

### (e) Unsafe Condition

This AD was prompted by a report of inadvertent auto flight system (AFS) altitude changes on the flight control unit (FCU); an investigation revealed that, depending on the ring selection, failure of the ALT knob on the FCU could change the target altitude. The FAA is issuing this AD to address erroneous target altitude during descent, climb, or go-around, which could result in an unexpected vertical trajectory deviation and loss of correct situational awareness that could potentially result in uncontrolled impact with the ground.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2021-0260, dated November 18, 2021 (EASA AD 2021-0260).

### (h) Exceptions to EASA AD 2021-0260

- (1) Where EASA AD 2021-0260 refers to its effective date, this AD requires using the effective date of this AD.
- (2) Where paragraph (1) of EASA AD 2021-0260 specifies to "inform all flight crews, and thereafter, operate the aeroplane accordingly," this AD does not require those actions as those actions are already required by existing FAA operating regulations.
  - (3) The "Remarks" section of EASA AD 2021-0260 does not apply to this AD.

### (i) Additional AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (j)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

# (j) Related Information

Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the

EASA website at https://ad.easa.europa.eu. You may view this material at the FAA,

(1) For information about EASA AD 2021-0260, contact EASA,

Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des

Moines, WA. For information on the availability of this material at the FAA, call

206-231-3195. This material may be found in the AD docket on the Internet at

https://www.regulations.gov by searching for and locating Docket No. FAA-2022-0464.

(2) For more information about this AD, contact Dan Rodina, Aerospace

Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South

216th St., Des Moines, WA 98198; telephone and fax 206-231-3225; email

dan.rodina@faa.gov.

Issued on April 11, 2022.

Lance T. Gant, Director,

Compliance & Airworthiness Division,

Aircraft Certification Service.

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